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## *Hydrofiller*™

Expands Renewable Energy Use and Facilitates Distributed Generation

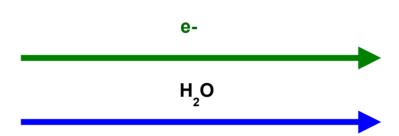
Scenarios



### Links Renewable Power to Transportation Fuel

#### **Verdant Turbine**



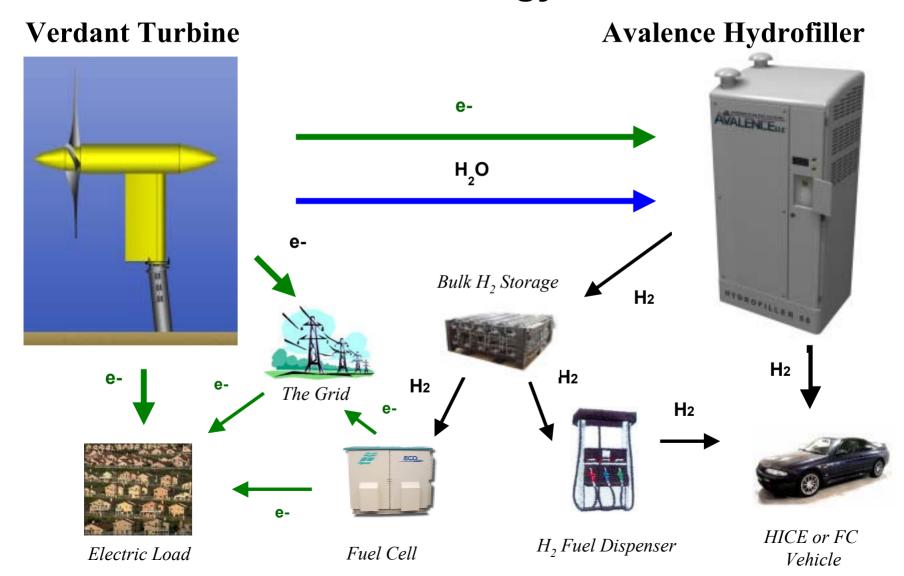








### Renewable Energy Web





# *Hydrofiller*™

"Ultra" High Pressure
Hydrogen Gas via
Electrolysis

Up to 10,000 psi

**NO COMPRESSOR** 







## All our competitors require compressors.

#### **Compressor Costs:**

- Capital Equipment
- Installation/Integration
- Maintenance
- Downtime

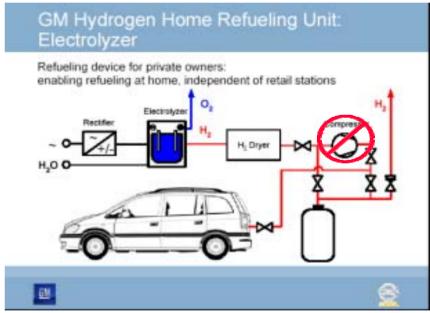
**Equivalent to 50% or more of the Electrolyzer Cost in DG Scenarios** 



# "Transportation Infrastructure means appliances, not just pipelines"

Keith Cole, Director Legislative & Regulatory Affairs, GM



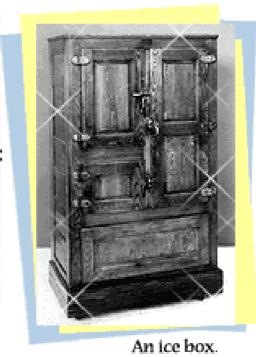




## There was a time ...



Association of Home Appliance Manufacturers





# **Hydrofiller**<sup>TM</sup>

Facilitates Distributed Generation Applications





## Market Penetration Path

Domestic

International



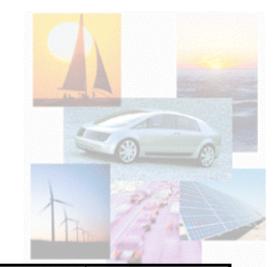
#### **Near Term Markets**

- **≻On-Road Public Transportation** 
  - **❖**Hythane<sup>®</sup>
  - **\*HICE**
  - **❖Fuel Cell**
- **≻Off-Road Transportation** 
  - Agricultural
  - Commercial
  - **<b>\***Marine

- ➤ Renewable Power Utilization
  - ❖Back Up Power
  - Peak Shaving
  - ❖24/7 Availability
  - ❖ Portable Power
- **≻**Custom Applications
  - ❖Military
  - Industrial
  - Recreational



# **Hydrofiller** TM Standard Models



Model	Output*	Input Power	Applications/Scale	Unit Availability	
Hydrofiller 15	1 kg/day (15 scfh)	2 kW	"Trickle Charge" Fuel Supplies for Back-Up or Portable Power	Winter '04	
Hydrofiller 50	3 kg/day (50 scfh)	7 kW	Residential Energy Storage, Single Vehicle Fueler, Industrial H2 Production	Summer '04	
Hydrofiller 175	10 kg/day (175 scfh)	25 kW	Commercial Energy Storage, Small Fleet Fueler, Industrial H2 Production	Spring '04	

<sup>\*</sup> Modular Construction Enables "Easy" Custom Sizing



# Sister Company E Magazine

"The challenge for the hydrogen economy is to educate the public, to win acceptance, to win customers. E reaches the first-adopters of clean hydrogen energy."





# Strategic Investors









**Contributed \$1 million to date** 





# Capitalization Plan Equity Investment

- Close to \$1M Invested by Seed CompaniesTo Date
- Three Tier Private Capitalization
  - Seed Round Support First Generation Deployment
     \$500K-\$1M for 12 months
  - Series A Expand Fabrication Capabilities
     \$3M for 24 months
  - Series B Expand Markets

\$12M for 24 months

 Strategic Merger/Trade Sale/Public Offering When Appropriate



## **Management Team**

- Deborah Moss CEO, Chairman
  - Co-Founded National Consumer Magazine
  - Led Management and Sales of Defense Contracting and Industrial Manufacturing Firms (\$15M in New Sales)
- Thomas Jackson President
  - Over 40 Years Designing Electrolytic Hydrogen Systems
- Martin Shimko VP Business Development
  - MIT Graduate, Over 20 Years in Project Management and Government Funding Acquisition (>\$7M in Grants)
- Sandeep Verma, PhD VP Technology Development
  - IIT Graduate, Extensive Experience in High Reliability Gas Process and System Design





## Why Invest?

- Patent Pending Breakthrough Technology
- Cuts the Costs of Capital Equipment for DG Hydrogen Fuel Production by 50% or more
- Deploying First Generation Units
- Expands Renewable Energy Use and Facilitates Distributed Generation Scenarios
- Revolutionizes Point-of-Use Transportation Fueling Infrastructure

Hydrogen fuel available where and when you want it.





Table 2 – Avālence 5 Year Financial Projections (\$K)							
Year	2004	2005	2006	2007	2008		
Sales revenue	300	1,400	5,200	9,500	14,700		
Grant revenue	500	1000	1000	500	500		
Total Operation Expenses	1,391	27567	5801	9136	13,329		
Income (Loss) from Operations	-491	-356	399	864	1,871		



## Sales Pipeline for 2004

2004 First and Second Generation Projects				
	(#) Size			
On-Road Transportation				
1) Hythane® Filling Depot for Mini-Buses, Fort Collins, CO	(1) 25 kW			
2) Hydrogen Filling Station for FC Bus, New Haven, CT	(2) 7 kW			
Electricity Utilization				
1) PV/FC - 24/7 Availability, Wiscasset, ME	(1) 2 kW			
2) PV/FC - Back-Up Power Supply, Shelton, CT	(2) 2 kW			
3) PV/FC - Portable Event Power, Fort Collins, CO	(1) 2 kW			
4) Hydro/HICE - Peak Shaving, Yarmouth, ME	(1) 7 kW			
Off-Road Transportation				
1) Hydro/HICE - Maintenance Fleet Fueling, Georgetown, CT	(1) 25 kW			
Industrial				
1) Grid and PV Generated, Huntsville, AL	(1) 7 kW			
Total	10			